UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

December 19, 2022

EPA's FY 2024-2028 Capital Planning Document

Roles and Responsibilities of the Integrated Project Team (CFO and SRPO):
The U.S. Environmental Protection Agency's Chief Financial Officer (CFO) oversees the agency's overall budget planning process, which includes the OMB submission, the President's Budget submission, and the development of the enacted operating plan. However, budget development in support of capital investments falls to EPA's Office of Mission Support (OMS), which oversees operational responsibilities for facilities, human resources, acquisition, grants, and information technology, among other functions. OMS's senior leadership, including the agency's Senior Real Property Officer (SRPO), the Chief Information Officer, and their staff, work closely with the Office of the Chief Financial Officer to manage resources associated with the real property portfolio.

Agency Strategic Plan:
EPA continues to prioritize space within both the agency master plan and strategic plan. Space consolidation and reduction is an agency priority and requirements are analyzed in light of these priorities prior to any lease renewals or new lease procurements. Additionally, EPA continues to review, consolidate, and release space across its inventory.

Annual Budget Process for Real Property:
EPA formulates space and capital planning at the project level in all planning budgets. EPA documents projects in the program project narratives of the agency's OMB submission and the President's budget submission. Once the EPA receives its appropriation and the enacted operating plan is approved, EPA sets resource levels by space project in its internal budget planning system and tracks the status of commitments and unliquidated obligations to ensure taxpayer resources are used judiciously. EPA conducts an end-of-year reconciliation process to ensure that all needed funding was used and, if available funds remain, resources are de-obligated and set aside for use the following fiscal year.

Major Lines of Business:
The EPA has two principal lines of business: science and administration. The agency's science mission includes research on environmental issues, testing and analysis in support of enforcement of environmental laws and regulations, and response to environmental emergencies. All of these functions require a network of laboratories in which to conduct research and analysis of issues in land, water, air, and human health. The administrative mission includes analysis and development of regulations, enforcement of environmental laws and regulations, administration of the Superfund program, environmental justice and civil rights, and general administration. These functions are housed in office space located around the country, and in a headquarters complex in Washington, D.C.

All these real property assets are regularly assessed for utilization and capacity. The laboratories are evaluated through a master planning process that updates each facility master plan approximately every five years. In addition, a major agencywide study was performed in 2015 that evaluated the capacity, condition, and deferred maintenance costs of all of EPA's laboratories to develop a detailed alternatives analysis to determine the most cost-effective configuration of the laboratory network. The office spaces are assessed for utilization on an on-going basis to identify where any excess space might exist, and where it is feasible to release space. Uniform office space guidelines were updated in 2016 to reflect new technologies, and to reduce space. These standards are now applied to all new and renovated office space.

Mission Requirements for Real Property:
In addition to office space for agency administrative and analysis staff, warehouse space for records and equipment storage, the EPA occupies laboratories with three distinct and complementary missions:

- **Regional Laboratories –** Regional Laboratories have primary responsibility for providing scientific data in support of decisions by the EPA Regional Offices' environmental programs, for addressing the comprehensive needs of the regions, and for informing immediate and near-term decisions on environmental conditions, emergency response, compliance, and enforcement.

- **National Program Laboratories** – National Program Laboratories have primary responsibility for supporting legislative mandates to develop and provide specific programs that support decisions for regulations, compliance, and enforcement at a national level.

- **Research and Development Laboratories** – Research and Development Laboratories have primary responsibility for developing knowledge, assessments, and scientific tools that underpin decisions about EPA's protective standards, risk assessments, and risk management decisions.

Mission Requirements to Release Space for OMB memorandum M-22-14

EPA has developed a space needs analysis to meet the requirements of the Office of Management and Budget's memorandum M-22-14 and M-21-25 in cooperation with the agency's Chief Human Capital Officer, Senior Real Property Officer, Chief Information Officer, and Chief Financial Officer. EPA's large scale office portfolio includes its ten regional offices and Federal Triangle Headquarters buildings, totaling 3,182,598 usable square feet, with approximately $181,409,290 annually for lease costs (FY 2022 dollars). EPA proposes to release approximately 20 percent of these leased spaces over the FY 2024-2028 timeline, if appropriation levels allow the agency to fund the necessary renovations and relocations.

Conduct Prioritized Needs Assessment:
Since 1974, EPA has conducted strategic master plans of all its laboratory facilities to determine condition assessments, infrastructure improvement needs, and fulfillment of mission requirements. These master plans have been updated approximately every 5 years to continually reflect changing needs and implementation of improvement projects. The master plans have

identified specific gaps in mission and infrastructure for each location. These gaps are quantified in detailed project descriptions and cost estimates covering needs projected over the next 20 years. The list of projects agencywide is further narrowed down to projects needed in the next 5 years, and these are prioritized to create an estimated five-year budget.

In addition, the nationwide laboratory study from 2012 through 2015 evaluated five scenarios for reducing the laboratory portfolio costs, using five metrics – space utilization, facility condition index (FCI), sustainability, science, and costs. Based on evaluation of the life cycle costs for each scenario, the study made specific recommendations that have resulted in a laboratory footprint reduction from 34 to 26 facilities. Additional consolidation opportunities are continually being reviewed and included into the agency master plans. The future laboratory count will be adjusted depending on mission and budget requirements.

Perform Alternatives Analysis:
During the laboratory study, for each of the seven scenarios considered, 30-year life cycle costs were calculated, including renovation costs, operation and maintenance costs, relocation and laboratory decommissioning, and the capital cost of increasing the FCI of each facility to the targeted values. The 30-year life cycle cost of each site was calculated based on net present value. The net present value (or present worth) calculations convert the monies spent at various times over the 30-year life cycle to an equivalent cost as of present day, to create a basis for comparison. The total value of each scenario was calculated as the summation of all costs for each location including inflation and projected economic growth. It is important to keep in mind that these scenarios are hypothetical and were modeled to determine what scenario minimizes the operational costs of the EPA laboratory portfolio over a 30-year life cycle. Additionally, a cash flow analysis was conducted on each scenario to estimate the payback period – the length of time theoretically required to recover the modeled investments necessary for facility renovations and replacement from resulting cumulative savings and avoided costs.

Resource Prioritization Process for Real Property:
The agency uses a master planning process that creates a prioritized list of projects for each owned facility based on evaluation by a team of architects and engineers and consultation with local staff and program/regional management. These site-specific projects are then entered into a process that ranks the projects according to a series of criteria including health and safety, mission requirements, energy reduction, infrastructure, security, and environmental compliance. The resulting five-year planning list is then merged with real estate priorities to develop a five-year capital plan.

Targeted Funding Gap Analysis:
Appropriation levels set the amount of work that EPA can accomplish every fiscal year. The agency remains committed to multi-year budgeting for all space projects so OMS can determine how best to manage resources and scale projects in line with anticipated appropriation levels.

- **Portfolio Life Cycle Cost -** The laboratory study utilized cost modeling guidance from the OMB's Circular A-94 to conduct life cycle benefit-cost analyses. Cost data collected and validated by the EPA Cost Subcommittee created an annual operational cost baseline using FY 2012 data. Based on an evaluation of seven scenarios for consolidation of laboratories

and improvements to bring all to a Facility Condition Index of 82, the life cycle cost estimate for capital budgeting is $400 million.

Performance Goals and Metrics:

- **Space Density and Utilization** - Space density is used as a measure of space utilization, represented as usable square feet (USF) per laboratory occupant. Occupant data includes all federal employees, contract workers, and grantees using space for laboratory functions. The usable square feet in each facility is consistently defined and calculated using classifications of laboratory, laboratory office, laboratory support, and special laboratory space. Non-laboratory related space is not included in the density calculation. The inventory data added up to more than 3.75 million gross square feet (GSF) of laboratory facilities and 2.75 million usable square feet (USF), as defined by the Building Owners and Managers Association (BOMA) Building Operations and Maintenance standards.

- **Facility Condition Index (FCI)** - The FCI is an industry standard asset management tool that measures the "constructed asset's" condition at a specific point in time. The facility condition for the study is assessed based on the General Services Administration (GSA) Guidance for Real Property Inventory reporting and the National Aeronautics and Space Administration (NASA) Deferred Maintenance Model, modified to include a scalar rating for architectural, mechanical, electrical, and plumbing systems, and a parametric estimating method to calculate renovation cost relative to replacement cost. The FCI, based on a scale of 1-100, assesses facility infrastructure and provides a consistent rating system for agencywide value comparison among facilities. The area weighted average FCI of EPA's laboratory portfolio was determined to be 64.4 at the time of the laboratory study.

- **Sustainability** - Sustainability metrics include space, energy, greenhouse gas emissions, and water reductions. Energy and water factors are included in the development of the FCI. The agency projects energy, water, GHG, and water reductions to continue to meet or exceed the current and future projected federal requirements. New Executive Orders addressing sustainability and resiliency and need to be addressed in the master and strategic planning process.

- **Costs** - Cost data are collected and organized into cost categories (e.g., information technology and telecommunications infrastructure, facility operations and maintenance, lease costs, costs of safety and health, security, and transportation).

Owned Facilities Capital Plan FY 2024-2028:

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total
SF disposed	0	0	WRS 15,205	0	0	15,205

Lease Facilities Additional Funds Required for Space Release FY 2024-2028:

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total
SF released office (Standard*)	**34,380**	77,179	**0**	**0**	**0**	**111,559**
SF office M-22-14 (FOW**)	20%	20%	20%	20%	20%	20% or approx. 636,520
SF released lab	Richmond 44,950	0	Chapel Hill 155,633		Houston and Athens 98,886	299,469
Budget FOW release	**$17.3 million**	**$32.7 million**	**$40.4 million**	**$35.4 million**	**$35.5 million**	**$161.3 million**

* Standard/planned space release
**Future of Work

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Faisal Amin, Chief Financial Officer
Office of the Chief Financial Officer

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Kimberly Y. Patrick, Principal Deputy Assistant Administrator and Senior Real Property Officer
Office of Mission Support